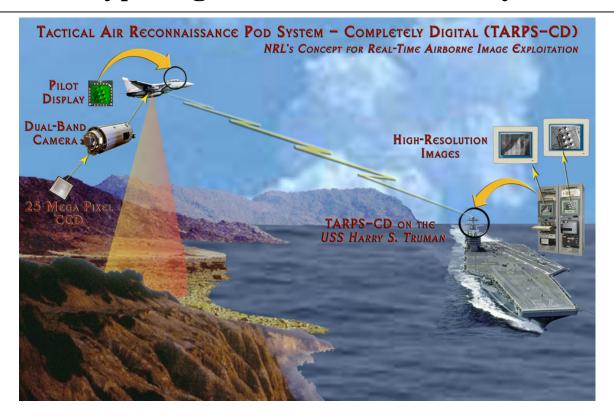
Prototype Digital Reconnaissance Systems



In the past several years, the NRL Optical Sciences Division has pioneered the use of digital technology in manned reconnaissance systems on P-3, F-14 and F/A-18 aircraft. Many technologies, such as wide-area coverage digital framing cameras, full-featured reconnaissance management systems, and the real-time display and screening of data-linked imagery were first tested and flown by NRL on P-3 and F-14 aircraft. The F/A-18 SHARP prototype pod payload was built, tested, and demonstrated by NRL. The SHARP payload was transitioned to NAVAIR and the SHARP pod is currently deployed in the fleet. Advanced features such as automatic mode operation, image exploitation in the cockpit, and precision pointing capabilities are being demonstrated by NRL in the F-14 TARPS-CD full-capability reconnaissance system.

NRL digital reconnaissance technology features:

- Dual-band (visible and IR) digital camera systems
 - Wide-area coverage / High coverage rate
 - Long-range standoff
- Wide-band datalinks
- In-cockpit image review and exploitation
- Precision geo-coordinate determination and image annotation
- Automatic mode operation
- Use on multi-mission aircraft (manned and unmanned)
- Concept of Operations (CONOPS) development
- Integration with ground station technology
- Standardized hardware interfaces, image formats, and image compression

For more information, please contact: Dr. John Lee U.S. Naval Research Laboratory, Code 5623 Washington, DC 20375 Lee8@ccf.nrl.navy.mil